



When Is Safety Too Much Safety?

A tongue in cheek look into our daily safety

By; Peter Ribbe PGCert.OHSEM, Dip. OHS,
PM, Mn, HRM, Bs. RRTWC, Trainer &
Assessor

When Is Safety Too Much Safety?

Introduction:



"*Salus populi suprema lex*," the Romans used to say. "The people's safety is the highest law." They were right, but are we getting carried away?

At work we are used to being surrounded by safety, but have you ever thought about the extremes of safety that surround us when we are not at work? If you look closely, it would seem that the whole world has gone safety mad!!! Seems like every one wants to cover their butts, but are we going overboard with the whole thing? In my book "Safety Awareness" I cover a point of not seeing the forest for the trees, when there is too much information the same result can happen, your brain starts to shut out certain aspects, this might be OK in the outside world, as you are responsible for yourself and your own actions, but this can have disastrous repercussions in a work place, that's the serious downside, following are some examples in articles of how much safety intrudes into our daily lives.

The real risk today may be our obsession with risk:

In our hot Australian climate, we are constantly reminded to keep ourselves hydrated, drink lots of water we are constantly reminded! But did you know that drinking lots of water can have adverse effects on your body?

The following article covers hydration.

Question: Can You Drink Too Much Water?

Answer: You've probably heard that it's important to 'drink plenty of fluids' or simply 'drink lots of water'. There are excellent reasons for drinking water, but have you ever wondered if it's possible to drink too much water. Here's what you need to know:

Can You Really Drink Too Much Water?

In a word, yes. Drinking too much water can lead to a condition known as water intoxication and to a related problem resulting from the dilution of sodium in the body, hyponatremia. Water intoxication is most commonly seen in infants under six months of age and sometimes in athletes. A baby can get water intoxication as a result of drinking several bottles of water a day or from drinking infant formula that has been diluted too much. Athletes can also suffer from water intoxication. Athletes sweat heavily, losing both water and electrolytes. Water intoxication and hyponatremia result when a dehydrated person drinks too much water without the accompanying electrolytes.

What Happens During Water Intoxication?

When too much water enters the body's cells, the tissues swell with the excess fluid. Your cells maintain a specific concentration gradient, so excess water outside the cells (the serum) draws sodium from within the cells out into the serum in an attempt to re-establish the necessary concentration. As more water accumulates, the serum sodium concentration drops -- a condition known as hyponatremia. The other way cells try to regain the electrolyte balance is for water outside the cells to rush into the cells via osmosis. The movement of water across a semipermeable membrane from higher to lower concentration is called osmosis. Although electrolytes are more concentrated inside the cells than outside, the water outside the cells is 'more concentrated' or 'less dilute' since it contains fewer electrolytes. Both electrolytes and water move across the cell membrane in an effort to balance concentration. Theoretically, cells could swell to the point of bursting.

From the cell's point of view, water intoxication produces the same effects as would result from drowning in fresh water. Electrolyte imbalance and tissue swelling can cause an irregular heartbeat, allow fluid to enter the lungs, and may cause fluttering eyelids. Swelling puts pressure on the brain and nerves, which can cause behaviors resembling alcohol intoxication. Swelling of brain tissues can cause seizures, coma and ultimately death unless water intake is restricted and a hypertonic saline (salt) solution is administered. If treatment is given before tissue swelling causes too much cellular damage, then a complete recovery can be expected within a few days.

It's Not How Much You Drink, It's How Fast You Drink It!

The kidneys of a healthy adult can process fifteen liters of water a day! You are unlikely to suffer from water intoxication, even if you drink a lot of water, as long as you drink over time as opposed to in taking an enormous volume at one time. As a general guideline, most adults need about three litres of fluid each day. Much of that water comes from food, so 8-12 glasses a day is a common recommended intake. You may need more water if the weather is very warm or very dry, if you are exercising, or if you are taking certain medications. The bottom line is this: it's possible to drink too much water, but unless you are running a marathon or an infant, water intoxication is a very uncommon condition.



The increasing obsession with safety has the opposite effect of the one intended. As with a mother determined to keep her child from all pain, the actual result is greater danger, more harm, and less actual living and happiness.

1. Avoiding germs gives you a weak immune system
2. Mandatory safety standards often cost lives
3. The Government's years-long drug approval process dooms terminal children
4. They need to control our rights...in order to fight for SECURITY in the war on terror?

Let's start with something even the caution-mongers can understand:

Avoiding risks can actually be physically dangerous. SOME exposure to risk prevents atrophy, giving the mind or body the opportunity to learn how to care for itself.

And then something the fear-freaks can never understand:

Life without risk ends up being barely worth living. Take away the freedom to choose what risks to take, and you take away the liberty to choose how much life to enjoy.

YOU may not want to do X, because it's scary for you, but other people may find it worth the risk.

And that is their right, as long as their right does not endanger others.



Chemicals:

Article from the U.S.

Author: Alan Ehrenhalt

There's a common pesticide called Atrazine that's used by farmers in many of the grain fields of the Midwest. Atrazine has seeped into the water supply of several Ohio cities, including the largest, Columbus. That's a problem, because it's a known carcinogen, proven to cause cancer in laboratory rats. Over the years, Columbus has had to check its water constantly to make sure that levels of the chemical do not exceed U.S. Environmental Protection Agency health standards.

It's not a danger to be taken lightly. On the other hand, the more you read about Atrazine, the more questions you begin to have about the whole matter. It turns out, as with many other chemicals, that the amount an ordinary person would consume in a lifetime falls far short of the amount that made the rats sick--in fact, it falls short by a

4 •

factor of thousands. The Columbus health department, doing its best to make an honest judgment, calculated a few years ago that Atrazine and other pesticides in the local water could be expected to cause the death of a Columbus resident once every 208 years.

I don't bring this up to ridicule the EPA. A death every two centuries is still a death. It's a legitimate moral and political issue. And its significance stretches beyond the confines of environmental policy. Once you start thinking about this, it leads you to ponder the role that the concept of safety plays in the whole universe of public policy.

The Atrazine story somehow dredged up from the recesses of my mind an old Arrid deodorant commercial from the 1950s. "Why be half safe?" the announcer asks in his oiliest, most pompous voice. "Use Arrid--and be sure."

It was brilliant. Let's face it: You never really know whether you have an offensive odor or not. You took a shower this morning, but maybe that wasn't good enough. Nobody's going to tell you. When it comes to stinking up the office, any degree of doubt is too much. Not only is half-safe dangerous; 99 percent isn't exactly reassuring, either. You want an iron-clad guarantee.

The problem of body odor, if I may spend one more paragraph on it, seems a pretty good proxy for the way we do things in the environmental field. We have an Arrid Extra-Dry policy. When something's this important, we don't like to stop short of certainty. The only problem is, certainty can't be achieved.

Most Americans are at least vaguely familiar with the Delaney amendment, the 1959 provision in federal law that all but prohibited the use of any substance proven to cause cancer, regardless of the amounts that might be required to trigger the disease. Although it is no longer on the books, Delaney created a mindset and we are still living with its consequences.

Not all of them pertain literally to the things we eat and drink. Tom Arrandale, our environment columnist, to whom I am indebted for the Atrazine story, has been writing for years about our all-or-nothing policy toward brownfields--the old manufacturing sites whose soil and water are polluted from years of industrial use. As most of the nation's key environmental laws were written in the 1970s and early '80s, a brownfield isn't really fit for re-use until it has been restored to its original pristine condition. In order for an old chemical factory to be redeveloped, the land around it has to be so clean that a child could scoop up a handful of dirt, swallow it and not get any sicker than he would if he did the same thing on a neighborhood playground.

Well, as Tom has pointed out many times, thousands of industrial sites will never be that clean again, no matter how much money is spent to fix them up. There's always a chance that someone could wander onto the property, ingest something toxic and die as

a result. But how often might this happen? Once every 208 years? I suspect less often than that. In the meantime, the property is unavailable for a whole range of commercial and industrial activities that are relatively safe to perform even with a lot of dangerous stuff still in the ground. Relatively safe--not 100 percent. If we want 100 percent, we abandon the site for decades, maybe centuries, until all the toxic residue has disappeared. But as we know, there are negative economic consequences to leaving that land unproductive. It's a question of just how safe we have to be.

In the past few years, American governments at all levels have been moving away from the Arrid Extra-Dry position and toward more of a compromise on environmental issues. More of them are talking about risk assessment--the systematic analysis of just how dangerous a particular chemical agent or industrial process is, and how many people would accept being less than 100 percent safe. There are risk- assessment provisions in the 1996 federal Safe Drinking Water Act, and efforts are under way to apply similar language to the issue of clean air.

I hadn't meant to go on so long with these particular examples. What I really want to do is make the larger point that all these troubling questions of safety and partial safety are relevant to lots of subjects that lie outside the boundaries of environmental science.

Here's one from the most mundane corner of everyday life: Have you ever driven through a small town, parked in an angled space on the main street or the town square, noticed how easy it is compared to parallel parking and wondered why more places don't do this?

Well, okay, probably you haven't. I have, though. I also know the answer to the question. The answer is that traffic engineers will tell you that angle parking isn't safe enough. People will sometimes back out of an angled space and right into an oncoming car. How often? Well, more often than if they parallel parked. After all, the engineers will remind you, this is not just a matter of convenience. There are human lives involved here. So the AASHTO Green Book, the Bible of American highway design, issues a stern warning: "Angle parking presents special problems." It is dangerous and should be used only in "special cases."

Traffic engineers have lots of rules like that. They will tell you that there shouldn't be any parking at all on busy arterials. They will insist that one-way streets are safer than streets that allow traffic in both directions. They will say that, in general, the wider a road is, the better it is. And they will be glad to supply statistics to back up the point. The more of these rules a community follows, the closer it can come to being 100 percent safe.

Of course, there are some other values that get trashed in the quest for ultimate safety. Local governments that stick to the Green Book end up turning their major streets into ugly, noisy, oversized speedways, utterly inhospitable to anyone who wants to use them for walking or even standing on the sidewalk. Whether they are in fact safer is a subject of debate. But let's assume for the moment that they are safer, that they do save at least a few lives over the course of time. Are they worth it? Does it make sense to destroy the aesthetic quality of public spaces in order to avoid an unspecified amount of physical harm?

That's not an easy one. If we're talking about 10 fatalities a year in a city of 100,000 people, it's one thing. If it's one death every 208 years, as in the case of Columbus and Atrazine, then I think most people would describe the rules as excessive. In the end, it becomes a game of risk assessment, a little like the one the environmentalists play. But risk assessment itself represents progress. It's a lot more sensible than simply drawing a line in the dust and saying, "Safety first! No compromises and no other priorities." There have to be other priorities.

The urban scholar Roberta Brandes Gratz, who has carefully documented many of the unfortunate results of safety extremism in local planning, points out that they are not limited to traffic engineering. She cites, for example, fire codes that require a heavy fire wall separating retail space on the ground floor and apartments on the upper floor of two-story commercial buildings. Few older buildings have such a wall, and constructing one adds thousands of dollars to the cost of each upstairs residential unit. Recent studies suggest that similar protection is provided by the use of a sprinkler system, which most of the buildings do have. The net result of the rigid rule is massive amounts of upper-floor space that stands unused, because landlords can't afford to meet the code.

Are these buildings a little safer with fire walls? Probably so. And the possibility of fire is so frightening that most rational people are willing to go to great lengths--even redundant lengths--in order to prevent it. Are the rules justified in this particular case? It's really a judgment call, isn't it?

And perhaps that's the ultimate point to be made on this whole subject. Unlike users of Arrid Extra-Dry, we can never really be sure that we have completely protected ourselves from the risks of any activity. We are stuck with being half-safe, whether we like it or not. The one thing we can know for sure is that we are never going to get to 100 percent, and that a one-dimensional attempt to get there is going to make us more and more uncomfortable the harder we try.

Too Much Safety Makes Kids Fat:

The drive to render children's play accident-proof carries unintended dangers, including an increase in obesity.

We were saddened to see last month that some kids scorched their feet after scampering shoeless across black rubber safety mats underneath playground equipment in New York.

The mats help prevent scrapes, fractures and sprains. But under the summer sun they also get hot, "not as hot as McDonald's coffee, but hot enough to scald tender feet," writes Philip Howard, chairman of the legal-reform coalition Common Good, in WSJ's Op-Ed pages today.

After news reports of the burns, activists and politicians were quick to call for more safety measures, including playground canopies. The cries for risk-reduction at practically any cost got Howard steaming.

Kids, he argues, need to be able to take risks and play in unstructured ways for proper development. "Scrapes and bruises are how children learn their limits, and the need to take personal responsibility," he writes.

Legal worries of adults are cramping kids' style. And that's helping make children fat—one in six kids in the US is obese. If kids were more active, as they were in the past, the problem would solve itself.

"But how do we lure children off the sofa? One key attraction is risk," Howard writes. "Risk is fun, at least the moderate risks that were common in prior generations." Kids love merry-go-rounds as much as ER docs hate them.

Playgrounds can be dangerous places. The Consumer Products Safety Commission says more than 200,000 kids a year wind up in ERs after being injured on playground equipment, mostly from falls. The CPSC has developed a checklist of safety features to look for in a playground. Likewise, the American Academy of Pediatrics has put together some playground safety tips here.

Howard's not against rubber mats. But he does say that someone needs to be authorized to make choices that balance safety and risk. Just as important, courts then need to respect those decisions. "Otherwise, the pious accusations of safety fanatics, empowered by the nearly universal fear of being sued, will guarantee a cultural spiral downwards toward the lowest common denominator," he concludes.



Germs:

Even Moderately Frequent Hand-Washing Increases the Risk of Dermatitis

That's right, the frequent hand washing the germophobes and cootie-paranoids urge you to undergo not only weakens your immune system, but it actually harms your skin.

In fact, scrubbing in general is harmful for skin, especially the famous "exfoliation". Upon finding out that our bodies are covered with dead skin cells, some people developed a sort of obsessive-compulsive disorder about removing them, even though they are the essential protection designed for our entire body.

Don't tell them that all hair is dead, or they'll be telling us to shave our heads, too.



Exposure to bacteria is good for you — according to Yale University study

“Friendly’ bacteria protect against type 1 diabetes, Yale researchers find

In a dramatic illustration of the potential for microbes to prevent disease, researchers at Yale University and the University of Chicago showed that mice exposed to common stomach bacteria were protected against the development of Type I diabetes.

The findings, reported in the journal “Nature”, support the so-called “hygiene hypothesis” – the theory that a lack of exposure to parasites, bacteria and viruses in the developed world may lead to increased risk of diseases like allergies, asthma, and other disorders of the immune system. The results also suggest that exposure to some forms of bacteria might actually help prevent onset of Type I diabetes, an autoimmune disease in which the patient’s immune system launches an attack on cells in the pancreas that produce insulin.

The root causes of autoimmune disease have been the subject of intensive investigation by scientists around the world.

In the past decade, it has become evident that the environment plays a role in the development of some overly robust immune system responses. For instance, people in less-developed parts of the world have a low rate of allergy, but when they move to developed countries the rate increases dramatically. Scientists have also noted the same phenomenon in their labs. Non-obese diabetic (NOD) mice develop the disease at different rates after natural breeding, depending upon the environment where they are kept. Previous research has shown that NOD mice exposed to killed (i.e., non-active) strains of tuberculosis or other disease-causing bacteria are protected against the development of Type I diabetes. This suggests that the rapid “innate” immune response that normally protects us from infections can influence the onset of Type 1 diabetes.

In the Nature paper, teams led by Li Wen at Yale and Alexander V. Chervonsky at the University of Chicago showed that NOD mice deficient in innate immunity were protected from diabetes in normal conditions. However, if they were raised in a germ-free environment, lacking “friendly” gut bacteria, the mice developed severe diabetes. NOD mice exposed to harmless bacteria normally found in the human intestine were significantly less likely to develop diabetes, they reported.



One for the ladies, is it safe to use makeup?

Shampoo

Average Number Of Chemicals: 15

MOST WORRYING: Sodium Lauryl Sulphate; Propylene Glycol, Methylisothiazoline. **POSSIBLE SIDE-EFFECTS:** **Neurological damage in fetus**, irritation, possible eye damage.

Eye Shadow

Chemicals: 26

MOST WORRYING: Polyethylene terephthalate. **POSSIBLE SIDE-EFFECTS:** **Linked to cancer, infertility, hormonal dysruptions and damage to bodies organs.**

Lipstick

Chemicals: 33

MOST WORRYING: Polymethyl Methacrylate. **POSSIBLE SIDE-EFFECTS:** Allergies, **linked to cancer.**

Nail Varnish

Chemicals: 31

MOST WORRYING: Phthalates. **POSSIBLE SIDE-EFFECTS:** **Linked to hormone disruption, fertility issues, linked to cancer and problems in developing babies.**

Fake Tan

Chemicals: 22

MOST WORRYING: Ethylparaben, Methylparaben, Propylparaben. **POSSIBLE SIDE-EFFECTS:** Rashes, Irritation, **hormonal disruption.**

Hairspray

Average Number Of Chemicals: 11

MOST WORRYING: Octinoxate, Isophthalates. **POSSIBLE SIDE-EFFECTS:** Allergies, **hormone disruption**, irritation to eyes, nose and throat, **changes in cell structure.**

Deoderant

Chemicals: 32

MOST WORRYING: Aluminum Zirconium, Isopropyl Myristate. **POSSIBLE SIDE-EFFECTS:** Organ Irritation, **hormone disruption.**

Blush

Chemicals: 16

MOST WORRYING: Ethylparabens, Methylparaben, Propylparaben. **POSSIBLE SIDE-EFFECTS:** Rash, irritation, **hormone disruption.**

Foundation

Chemicals: 24

MOST WORRYING: Polymethyl methacrylate. **POSSIBLE SIDE-EFFECTS:** **Disrupts immune system, allergies, links to cancer.**

Perfume

Chemicals: 250

MOST WORRYING: Benzaldehyde, toluene. **POSSIBLE SIDE-EFFECTS:** **Sperm damage, linked to cancer, organ irritant, hormone disruption.**

Body Lotion

Chemicals: 32

MOST WORRYING: Methylparaben, Propylparaben, Polyethylene Glycol, also found in cleaners. **POSSIBLE SIDE-EFFECTS:** Rash, irritation, **hormone disruption.**



PINK = Linked to Cancer **Blue** = Could Affect Your Your Fetus

Just in case you thought "I am a man, that stuff does not affect me!
Think again!



If you use:

Shampoo Conditioner
Makeup Bubble Bath
Body Lotions Soap
Laundry Detergent
Toothpaste Muscle Rubs
Personal Care Products
Hair Styling Products
Baby Bottles Sunscreen
Air Fresheners
Bug Spray Diaper
Balms

you are at risk!

Always Wearing Sunblock Promotes Skin Cancer:

That's right: Normal, unprotected exposure to sunlight gives you a /healthy/ tan, of the type that protects your skin from the burns that actually cause skin cancer. If you don't get a tan, your pale skin will eventually get sunburned on accident. It's the burn, not the tan, that harms your skin.

Sensible sunlight exposure prevents skin cancer; findings baffle old school doctors:

Scientists are baffled by the results of a study published in the Feb. 2, 2005 issue of the Journal of the National Cancer Institute. In this study, we learn that exposure to sunlight actually reduces the risk of skin cancer.

This is important evidence backing up what doctors like Dr. Michael Holick, author of "The UV Advantage," have been saying for years: Sunlight is actually good for you. In fact, the risk of many cancers increases when you do not have sufficient exposure to sunlight.

It's remarkable just how baffled the scientists really are with the results of the study. They can't believe everything they've been told all these years could somehow be false. Remember, the conventional medical community has been taught that sunlight is bad for you. You must cover up your skin, wear sunscreen and avoid any sunlight exposure at all if you want to be healthy, they've said. This is the line of propaganda pushed by the sunscreen industry, and of course the dermatology industry, which has been largely funded by the sunscreen manufacturers. They've been telling people sunlight causes cancer, and you must avoid the sun at all costs.

That's all hogwash. As I've been saying on this site for quite some time, the human body was designed to live in harmony with sunlight. We evolved under natural sunlight, not under fluorescent lights with a lifetime supply of sunscreen on the shelf. We need sunlight in order to be healthy. I've covered this in dozens of other articles on this site. Now we have additional evidence backing up that notion, and it may finally begin to turn the tide and help doctors and researchers realize they need to stop telling people to avoid sunlight and start telling people to get more sunlight.

Of course it's all about sensible exposure, which is determined by the pigmentation in your skin. The darker your skin, the more sunlight you need in order to generate vitamin D. The lighter, or fairer, your skin, the less sunlight you need. By the way, one of the people commenting on this study was so baffled by the results they said, "It must all be due to vitamin D, and if you want vitamin D, there are better places to get it like drinking milk." It's typical advice from conventional medicine. They're still telling people to avoid the sun and, instead, drink lots of cows' milk. How's that for lousy health advice?

You see, milk doesn't really have much vitamin D in it, especially if it's offered in those typical translucent containers, because light destroys the vitamin D content. Also, this

whole line of thinking by conventional medicine misses the point that there may be other characteristics of sunlight that encourage human health aside from just vitamin D. In other words, there's a lot more going on here.

There is probably a phototherapy effect that goes well beyond the biochemistry of vitamin D production. Even if you're just looking at vitamin D, there are so many healing benefits of vitamin D that it's worth promoting sunlight exposure for that reason alone. Vitamin D regulates the growth of cancer cells. It impairs the proliferation of cancer tumors in the body, and at the same time it is extremely important for absorption of calcium in the small intestine.

(This, by the way, helps explain why so many senior citizens get osteoporosis today even though they think they're taking plenty of calcium supplements. The reason is they don't have enough vitamin D to actually absorb the calcium. So they start out with a vitamin D deficiency due to lack of sunlight, and they end up with a calcium deficiency even though they're taking lots of calcium supplements. The end result is, of course, osteoporosis or osteomalacia, the advanced stage of osteoporosis. Once that's diagnosed by conventional medicine, they're usually given hormone replacement therapy or a variety of prescription drugs rather than simply being told to get more sunlight and engage in some form of physical exercise to enhance bone mineral density.)

In the UK, doctors have already been told they're doing a disservice to patients if they tell them to avoid sunlight. They're already being advised to tell people to get more sunlight and not to wear sunscreen every time they go outside, at least not for the first few minutes of sun exposure. So the UK is well ahead of the U.S. in this thinking. The U.S. seems to be the last country in the world to acknowledge any healing benefits of therapies outside of drugs, surgery and radiation. It seems to take forever for U.S. doctors to come around to the idea nature has some wisdom when it comes to healing. Here we're seeing yet another example of how nature actually prevents and even reverses cancer in the human body.

It is not an exaggeration to say sunlight and vitamin D can prevent and even reverse cancers in the human body. We're talking about prostate cancer, breast cancer, cervical cancer and now, skin cancers as well. In fact, there seems to be a systemic anti-cancer effect provided by sunlight exposure and vitamin D.

So what have we learned?

There is so much exaggerated safety outside of our work place; it's a wonder anybody even goes outside, government health officials, scientists and do gooders in our communities, tell us one thing, only to find that it is wrong later on, scare mongering is a way to get funding for studies, university programs and grants. But really! Why are they all trying to wrap everyone in cotton wool? After all, isn't RISK & DANGER fun? Why do people sky dive, bungy jump, baseline jump, climb Mt. Everest? They are all adults and know the dangers and risks associated with what they do! Maybe all the do gooders and government departments should leave safety to those that know it best, the safety person at work! Is it not enough to be safe at work? Not much fun being safe and risk free when you're not working. Life is a risk, life is short, let's enjoy it while we can!